

MM4454.ST25.txt
SEQUENCE LISTING

<110> Hitomi, Ji ro
Yamamura, Tokujiro
Kimura, Tatsuji
Yamaguchi, Ken

<120> Novel calcium-Binding Proteins

<130> MM4454

<140> 09/910,208

<141> 2001-07-20

<160> 20

<170> PatentIn version 3.3

<210> 1

<211> 429

<212> DNA

<213> Bovine calcium binding protein

<220>

<221> exon

<222> (48)..(323)

<223> Amino acid sequence of calcium-binding protein from
bovine amniotic fluid

<400> 1
ctggcattcc acacttctgt gcagaggggt gaacgtagtt tggtaaa atg act aag 56
Met Thr Lys
1

ctg gaa gat cac ctg gag gga atc atc aac atc ttc cac cag tac tcc 104
Leu Glu Asp His Leu Glu Gly Ile Ile Asn Ile phe His Gln Tyr Ser
5 10 15

gtt cgg gtg ggg cat ttc gac acc ctc aac aag cgt gag ctg aag cag 152
Val Arg Val Gly His Phe Asp Thr Leu Asn Lys Arg Glu Leu Lys Gln
20 25 30 35

ctg atc aca aag gaa ctt ccc aaa acc ctc cag aac acc aaa gat caa 200
Leu Ile Thr Lys Glu Leu Pro Lys Thr Leu Gln Asn Thr Lys Asp Gln
40 45 50

cct acc att gac aaa ata ttc caa gac ctg gat gcc gat aaa gac gga 248
Pro Thr Ile Asp Lys Ile Phe Gln Asp Leu Asp Ala Asp Lys Asp Gly
55 60 65

gcc gtc agc ttt gag gaa ttc gta gtc ctg gtg tcc agg gtg ctg aaa 296
Ala Val Ser Phe Glu Glu Phe Val Val Leu Val Ser Arg Val Leu Lys
70 75 80

aca gcc cac ata gat atc cac aaa gag taggaagctc tttccagcaa 343
Thr Ala His Ile Asp Ile His Lys Glu
85 90

tgtccccaag aagacttacc cttctcctcc ctgaggctgc cttacccgag ggaagagaga 403
attaataaac gtactttggc aaagtt 429

MM4454_SEQUENCECNEDITS9-9-10.txt

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<210> 2
 <211> 50
 <212> PRT
 <213> Bos taurus

<400> 2

Thr Lys Leu Glu His Leu Glu Gly Ile Ile Asn Ile Phe His Gln Tyr
 1 5 10 15
 Ser Val Arg Val Gly His Phe Asp Thr Leu Asn Lys Arg Glu Leu Lys
 20 25 30
 Gln Leu Ile Thr Lys Glu Leu Pro Lys Thr Leu Gln Asn Thr Lys Asp
 35 40 45
 Gln Pro
 50

<210> 3
 <211> 8
 <212> PRT
 <213> Bos taurus

<400> 3

Ile phe Gln Asp Leu Asp Ala Asp
 1 5

<210> 4
 <211> 12
 <212> PRT
 <213> Bos taurus

<400> 4

Asp Gly Ala Val Ser Phe Glu Glu Phe Val Val Leu
 1 5 10

<210> 5
 <211> 9
 <212> PRT
 <213> Bos taurus

<400> 5

Thr Ala His Ile Asp Ile His Lys Glu
 1 5

<210> 6
 <211> 31
 <212> PRT
 <213> Bos taurus

<400> 6

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Leu Pro Lys Thr Leu Gln Asn Thr Lys Asp Gln Pro Thr Ile Asp Lys
 1 5 10 15

Ile Phe Gln Asp Leu Asp Ala Asp Lys Asp Gly Ala Val Ser Phe
 20 25 30

<210> 7
 <211> 20
 <212> PRT
 <213> BOS taurus

<400> 7

Glu Phe Val Val Leu Val Ser Arg Val Leu Lys Arg Ala His Ile Asp
 1 5 10 15

Ile His Lys Glu
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<210> 8
 <211> 20
 <212> DNA
 <213> Artificial

<220>
 <223> sense primer

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> n is a, c, g or t

<220>
 <221> misc_feature
 <222> (15)..(15)
 <223> n is a, c, g, or t

<400> 8
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<210> 9
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<220>
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<400> 9
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 <212> DNA
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23

<210> 11
 <211> 24
 <212> DNA
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<220>
 <223> reverse primer

<400> 11
 ttgacaccag accaactggg aatg

24

<210> 12
 <211> 440
 <212> DNA
 <213> human calcium-binding protein

<220>
 <221> exon
 <222> (22)..(297)
 <223> Deduced amino acid sequence for human calcium-binding protein

<400> 12
 gggttaacatt aggcctgggaa g atg aca aaa ctt gaa gag cat ctg gag gla
 Met Thr Lys Leu Glu Glu His Leu Glu Gly
 1 5 10

51

att gtc aat atc ttc cac caa tac tca gtt cgg aag ggg cat ttt gac
 Ile Val Asn Ile Phe His Gln Tyr Ser Val Arg Lys Gly His Phe Asp
 15 20 25

99

acc ctc tct aag ggt gag ctg aag cag ctg ctt aca aag gag ctt gca
 Thr Leu Ser Lys Gly Glu Leu Lys Gln Leu Leu Thr Lys Glu Leu Ala
 30 35 40

147

aac acc atc aag aat atc aaa gat aaa gct gtc att gat gaa ata ttc
 Asn Thr Ile Lys Asn Ile Lys Asp Lys Ala Val Ile Asp Glu Ile Phe
 45 50 55

195

caa ggc ctg gat gct aat caa gat gaa cag gtc gac ttt caa gaa ttc
 Gln Gly Leu Asp Ala Asn Gln Asp Glu Gln Val Asp phe Gln Glu Phe
 60 65 70

243

ata tcc ctg gta gcc att gcg ctg aag gct gcc cat tac cac acc cac
 Ile Ser Leu Val Ala Ile Ala Leu Lys Ala Ala His Tyr His Thr His
 75 80 85 90

291

aaa gag taggtagctc tctgaagctt tttacccagc aatgtcctca atgaggggtct 347

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Lys Glu

tttctttccc tcaccaaaac ccagccttgc ccgtggggag taagagttaa taaacacact 407

cacgaaaagt taaaaaaaaa aaaaaaaaaat tct 440

<210> 13
<211> 20
<212> DNA
<213> Artificial

<220>
<223> sense primer

<400> 13
actatcaaca tcttcacca 20

<210> 14
<211> 20
<212> DNA
<213> artificial

<220>
<223> antisense primer

<400> 14
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<210> 15
<211> 15
<212> DNA
<213> Artificial

<220>
<223> primer PMN.HP7s 1-15

<400> 15
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<210> 16
<211> 15
<212> DNA
<213> Artificial

<220>
<223> primer PMN.HP7A 126-112

<400> 16
ttggaatatt tcac 15

<210> 17
 <211> 20
 <212> DNA
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<220>
 <223> primer HP7S 7-26

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<400> 17
 acattaggct gggaagatga
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<210> 18
 <211> 20
 <212> DNA
 <213> Artificial

<220>
 <223> primer HP7A 336-317

<400> 18
 ggacattgct gggtaaaaag
 20

<210> 19
 <211> 92
 <212> PRT
 <213> Bovine calcium binding protein

<220>
 <221> misc_feature
 <222> (1)..(92)
 <223> Amino acid sequence of SEQ ID No. 1

<400> 19

Met	Thr	Lys	Leu	Glu	Asp	His	Leu	Glu	Gly	Ile	Ile	Asn	Ile	phe	His
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Gln	Tyr	Ser	val	Arg	val	Gly	His	phe	Asp	Thr	Leu	Asn	Lys	Arg	Glu
			20					25					30		
Leu	Lys	Gln	Leu	Ile	Thr	Lys	Glu	Leu	Pro	Lys	Thr	Leu	Gln	Asn	Thr
		35					40					45			
Lys	Asp	Gln	Pro	Thr	Ile	ASP	Lys	Ile	phe	Gln	ASP	Leu	ASP	Ala	ASP
		50				55					60				
Lys	Asp	Gly	Ala	val	Ser	phe	Glu	Glu	phe	val	val	Leu	val	Ser	Arg
65					70				75					80	
val	Leu	Lys	Thr	Ala	His	Ile	ASP	Ile	His	Lys	Glu				
				85					90						

<210> 20
 <211> 92
 <212> PRT
 <213> human calcium binding protein

<220>
 <221> MISC_FEATURE
 <222> (1)..(92)

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<223> Amino acid sequence of SEQ 1D NO. 12

<400> 20

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1				5					10					15	
Gln	Tyr	Ser	val	Arg	Lys	Gly	His	phe	ASP	Thr	Leu	Ser	Lys	Gly	Glu
			20					25					30		
Leu	Lys	Gln	Leu	Leu	Thr	Lys	Glu	Leu	Ala	Asn	Thr	11e	Lys	Asn	11e
		35					40					45			
Lys	ASP	Lys	Ala	val	11e	ASP	Glu	11e	phe	Gln	Gly	Leu	ASP	Ala	Asn
	50					55					60				
Gln	ASP	Glu	Gln	val	ASP	phe	Gln	Glu	phe	11e	Ser	Leu	val	Ala	11e
65					70					75					80
Ala	Leu	Lys	Ala	Ala	His	Tyr	His	Thr	His	Lys	Glu				
				85					90						

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